

WHAT IS CLAIMED IS:

1. A sealing member adapted to a rolling bearing, wherein said rolling bearing comprises an inner ring, an outer ring, and a plurality of rolling elements rotatably disposed therebetween and defines a space accommodating said rolling elements and having at least one end part opening opened in the axial direction thereof, and wherein the space is formed between the inner circumferential surface of the outer ring and the outer circumferential surface of the inner ring, said sealing member comprising:

10 a first portion substantially covering at least a part of the end part opening of the space; and

15 a second portion being bonded and fixed to an axial direction end surface of one of the inner and outer rings.

2. The sealing member according to claim 1, further comprising:

20 a core layer;

an aluminum or alumina film disposed on said core

25 layer; and

an adhesive layer further disposed on said aluminum or alumina film, said adhesive layer constituting the second portion.

3. The sealing member according to claim 2, wherein

said sealing member is substantially formed into a circular shape.

4. The sealing member according to claim 3, wherein
5 said sealing member is substantially formed into an annular
shape.

5. The sealing member according to claim 3, wherein said sealing member has a tub portion which is outwardly protruded therefrom in an radial direction.

6. The sealing member according to claim 4, wherein said sealing member has a tub portion which is outwardly protruded therefrom in an radial direction.

7. The sealing member according to claim 4, wherein said sealing member has a tub portion which is inwardly protruded therefrom in an radial direction.

20 8. The sealing member according to claim 1, wherein
the second portion is bonded and fixed to the axial direction
end surface with a predetermined detachable bonding force.

9. The sealing member according to claim 1, wherein
25 the second portion is bonded and fixed to the axial direction

end surface through an adhesive having a predetermined detachable bonding force which is lowerable when the adhesive is subject to an ultraviolet ray irraiation.

5 10. The sealing member according to claim 1, wherein the second portion is bonded and fixed to the axial direction end surface through an adhesive having a predetermined detachable bonding force which is lowerable when the adhesive is heated.

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11. A rolling bearing comprising:

an inner ring;

an outer ring;

15 a plurality of rolling elements rotatably disposed therebetween and accommodated with a space which has at least one end part opening opened in the axial direction thereof and is formed between the inner circumferential surface of the outer ring and the outer circumferential surface of the inner ring; and

20 a sealing member including a first portion substantially covering at least a part of the end part opening of the space, and a second portion being bonded and fixed to the axial direction end surface of one of the inner and outer rings.

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12. The rolling bearing according to claim 11, wherein
said seal member comprises:

a core layer;

5 an aluminum or alumina film disposed on said core
layer; and

an adhesive layer further disposed on said aluminum
or alumina film, said adhesive layer constituting the second
portion.

10 13. A thin motor comprising:

a first member on which a stator is supported and fixed;

15 a second member on which a rotor facing the stator is
supported and fixed; and

a rolling bearing relatively and rotatably combining

said second member with said first member;

wherein the outer diameter size of the rotor is seven
times or more as much as the axial direction size of the motor
as a whole, and

wherein said rolling bearing comprises,

20 an inner ring;

an outer ring;

25 a plurality of rolling elements rotatably
disposed therebetween and accommodated with a space which has
at least one end part opening opened in the axial direction
thereof and is formed between the inner circumferential surface

of the outer ring and the outer circumferential surface of the inner ring; and

5 a sealing member including a first portion substantially covering at least a part of the end part opening of the space, and a second portion being bonded and fixed to the axial direction end surface of at least one of said inner and outer rings.

10 14. The thin motor according to claim 13, wherein said seal member comprises:

a core layer;

an aluminum or alumina film disposed on said core layer; and

15 an adhesive layer further disposed on said aluminum or alumina film, said adhesive layer constituting the second portion.

15. A bearing device comprising:

20 an axis side member including a cylindrical part with an inner ring mounted externally, and an axis mounted internally, and an outward flange part disposed on one end side in the axial direction;

25 a housing including a ring part with the outer ring mounted internally, and an outward flange part disposed on the other end part in the axial direction;

10 a rolling bearing disposed between said axis side member and said housing and having outside surface covered by said outward flange part of said axis side member;

5 a sheet covering a gap between the inner ring and the outer ring and disposed externally on the other end side in the axial direction of the bearing device, the sheet being bonded on at least one of the outward flange part of the housing, the inner ring and the outer ring by a detachable bonding force.

15 16. The bearing device according to claim 15, wherein detachable force is lowerable when the bonded portion of the sheet is subject to an ultraviolet ray irraiation.

20 17. The bearing device according to claim 15, wherein detachable force is lowerable when the bonded portion of the sheet is heated.